

Flight, September 4th, 1909.

Flight

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FLIGHT PROGRESS IN ENGLAND.—Mr. S. F. Cody on Saturday last at the moment of crossing the Basingstoke Canal, during his 8 miles flight in 9½ minutes, around Aldershot. In order to demonstrate the easy control of his flyer, Mr. Cody at times throws his hands up over his head, as, it will be noticed, he was doing when our photograph was secured.

HISTORIC RHEIMS—AND AFTERWARDS.

It taxes the English tongue to the utmost of its reaches adequately to picture the epoch-making events that have marked the progress of the flying races at Rheims. Now they are matters of history, none can gainsay that journeys of over a hundred miles in length can be made by aeroplane without pause; or that the same machine can fly to great heights, or that it can carry comparatively great weights as represented by three persons aboard. On those three counts Henry Farman and his biplane have undoubtedly scored tremendously at the first flying races in the history of the newest phase of scientific manufacturing engineering, as is told in the story that we give of this never-to-be-forgotten meeting at Rheims. But the encouraging feature of the demonstration has been the revelation of the various qualities wherein each system of design proves better than the rest.

The meeting has not shown biplanes as a class to be pronouncedly better than monoplanes, or the other way about. The Antoinette has, perhaps, shown itself to possess more automatic fore-and-aft stability in flight than the little Bleriot, that seemed to have the better speed and lift for their wing area and horse-power; the Curtiss doubtless displayed the best speed of the biplanes, and proved the quickest to launch into flight; the Farman shone for weight-carrying, length of flight and ease of alighting; the Wrights made their mark as to quickness in executing turns; the Voisins showed strength and a certain degree of automatic stability, and so forth. Thus it is good for the movement that no one machine should possess a monopoly of good points.

The organisation of the untried thing is rarely an enviable task. It seldom reflects great credit. But in the case of the splendidly successful enterprise, promoted in chief measure by highly praiseworthy local initiation at Rheims, everything was planned with the most brilliantly imaginative foresight, so that, despite the gatherings being greater than on the occasions of any known French military review or race meeting, traffic facilities and accommodation of all sorts were on an adequate scale. Would we could always rely upon doing similar things in equally satisfactory fashion in this country.

After making due allowance for the generally favourable nature of the weather conditions, the ideal ground, and so forth, the fact remains that the meeting has shown the mechanical flying machine to be farther advanced than the most optimistic had dared to hope. It has revealed that, in future meetings, certain further steps may be embarked on profitably towards the development of organisation. The first is that, to enable the various competitions to convey some notion of the relative efficiency, a system of handicapping or of classification should be drawn up by the Federation Internationale Aéronautique. As such a departure calls for the most careful consideration—and events in the flying world march with exceeding rapidity—it were well that time should be taken by the forelock and the task commenced forthwith. It is obvious that aeroplane rating, if we may use the term, must be arrived at by the observance of certain cardinal points, such as the wing area, the horse-power employed, and the weight lifted. But the details will want a deal of working out. The statistics in connection with the Rheims meeting should serve admirably as a basis for making the needful calculations.

The second point to be learnt from the meeting as conducted at Betheny is that it has proven a 6-mile

course to be too long from the spectacular point of view, while it was plain that the competitors could manage quite well with a 3 mile or 5 kilom. to the lap course. But it is desirable that the flight path should be as long as possible in relationship to its width, that the performers may be reasonably close to the spectators throughout the duration of any competition. This is a change that can be managed quite conveniently at Rheims, and the desirability of it augurs well for meetings that may be organised in this country, where it would be impossible to find the equivalent in expanse of the vast plain hard by the capital of the Champagne district.

We regret to observe, however, that certain attempts are being made to promote flying race meetings in this country in what appears to us to be a premature fashion. There is talk of a meeting at Blackpool, and theoretically every encouragement should be given to the enterprising council of that well-managed watering place for enabling the public to benefit from the natural facilities which are at hand for an aviation meeting of this kind. But the Aeroplane Club has also rushed forward with what we fear to be precipitate haste, proclaiming from the housetops that it is also organising one at Wembley Park in conjunction with the proprietary of that enterprise. Of course, more or less direct profit (or advertisement) is one of the chief aims of both schemes. In the case of the second named, everyone who has followed the aeronautic movement at all closely knows that the Aeroplane Club is bound to secure the auspices of the Federation Internationale Aéronautique before it can hold any sort of contest in which flying machines are concerned. This is so because all flyers taking part in it would otherwise be liable to disqualification from future competitions organised under its auspices and regulations in this or any other country. Now, the Federation is represented in this country by the Aero Club of the United Kingdom, and by no other body, so that in any case it would fall to the A.C.U.K. to exercise the real control over the proposed meeting at Wembley Park if it were held at all. Yet, from the announcements in the Press, we perceive that the Aeroplane Club "of Great Britain and Ireland" has been studiously endeavouring to get all the kudos and all the advertisement out of the scheme, its self-assumed name leading the public into supposing that it is the accredited National authority in all such matters as these. Of course, provided the regulations of the Federation Internationale Aéronautique are complied with, and the chosen venue is considered suitable, the Aero Club of the U.K. would, as a matter of course, grant a permit to any minor organisation which desired to hold a meeting of the kind.

But the notices that have been issued concerning the project at Wembley contain no mention of the Aero Club at all, and such references as there have been to the Federation Internationale Aéronautique are hardly calculated to indicate the true position of the Aeroplane Club to the man in the street. Thus quite early in the history of the flying movement we have an example of the absolute desirability of avoiding the duplication of aeronautical bodies. It will be remembered that some time ago an agreement was come to by the only recognised bodies whereby the Aeronautical Society of Great Britain, which is the oldest-established institution of the kind in the world, represents the scientific phases of the movement, the Aero Club of the United Kingdom the

sporting and social aspects, and the Aerial League of the British Empire the patriotic and propaganda. The field is amply covered by such provision.

In any case, the suggestion of hastily promoting a flying machine meeting over here this month or next merely because one has materialised in France in the month of August, and has been extraordinarily successful, is one that is not necessarily feasible or to be recommended on balance. Flying conditions in this country cannot well be as ideal as those that obtained at Rheims, especially a month later, when the summer season will be overpast, and any only partial success would in the light of the French meeting do incalculable harm to British interests. Furthermore, we have the example of the well thought out, long since planned Brescia meeting that is no hurriedly gotten up scheme, and that is one concerning a district vastly more favourably situated climatically for the purpose than any part of these islands can be. Yet the Brescia meeting will not be a reproduction of the Betheny one, despite the lavish scale of the money prizes. Already this flying machine business is establishing itself as a serious industry, so that we find M. Bleriot announcing that the time available for coming over here on such an errand this year is far too short. And this statement of his brings to mind the reflection that there has been a deal of premature announcing of arrangements that have never been made. We have in mind, of course, the much talked-of Bleriot-Latham match, and are bound to confess that we do not like the style in which the Wembley project has been projected by the Aeroplane Club.

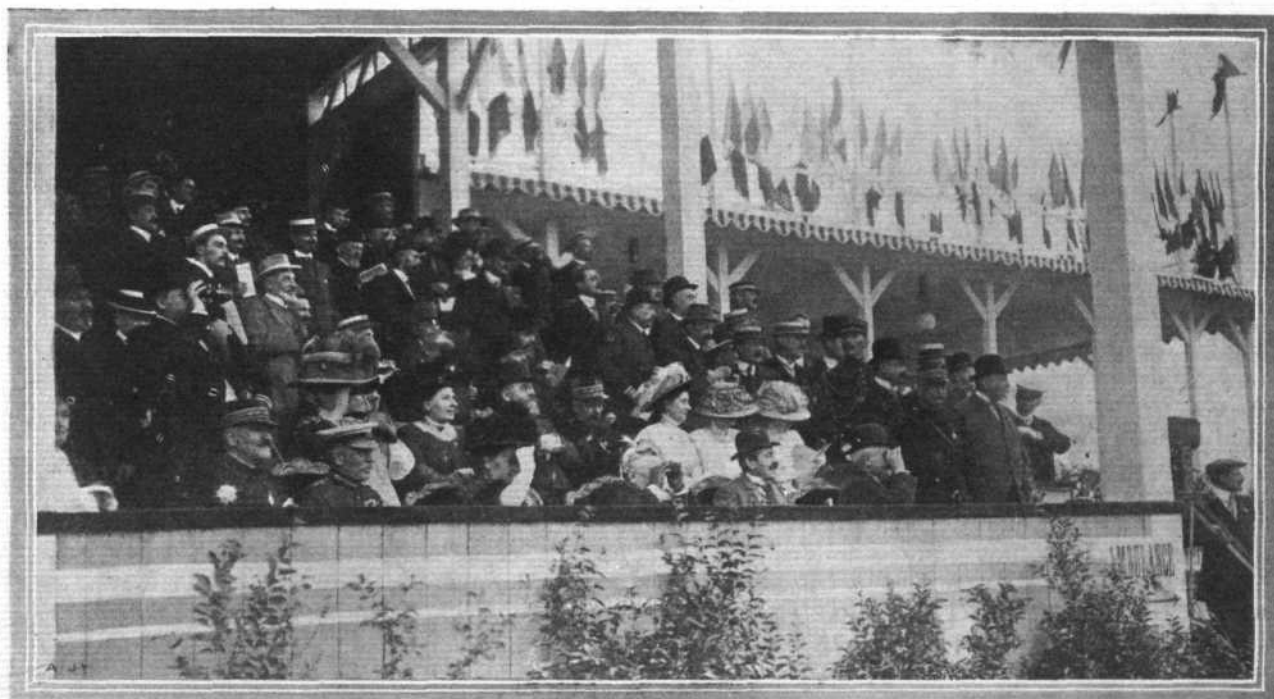
Apart from the example of Brescia, we must remember that aviators are very much concerned with other matters

than demonstrating in England this month, for they have to make all their preparations against the Paris flying machine show. To those who might hastily assume slackness on the part of the A.C.U.K., and who might be inclined to applaud the Aeroplane Club for their misplaced energy, we would point out that all such practical points as those just mentioned have doubtless been had in mind by the representative British Club, which is happily free from the taint of cheap advertising, and can therefore act as a real body of encouragement, having a sound and lasting policy. We write as a journal devoted to the best interests of the flying movement, and without any specific authority or inside knowledge of what the views of the Aero Club may be, but it is, moreover, only reasonable to assume that that body is aware that fairly early next year there should be a number of British aeroplanists, with experience of British flyers, in addition to the present foreign leaders, so that a little delay in the date of holding our first aviation week would not be all loss to the immediate prospects of the British industry. In other words, let not the enthusiastic well-wisher of aeronautic progress in this country fall into the error of helping to set up conflicting representative institutions, which cannot fail to weaken the cause sooner or later, merely because he allows himself to be carried away by the theatrical blowing of trumpets of a subsidiary organisation with a high-sounding name, that has no real *raison d'être*. There is absolutely no reason to suppose that the Aero Club has been idle or unmindful. If it has remained seemingly inactive to the man in the street it has only done so in the best interests of the movement.

Flight and Insurance.

ONE "sign of the times" that flight is getting beyond the mere "possible" stage is seen in the way that insurance underwriters are seriously considering the business to be done in "risks" incurred by those taking an active part in aerial navigation. A good deal of

money changed hands in connection with the cross-Channel flight of M. Bleriot, but that partook very much of the nature of gambling on the result. Now, however, underwriters, seeing the marvellous progress which is made week by week, are contemplating developing a special branch of the business for dealing with aviation.



RHEIMS AVIATION MEETING.—The President's "box" in the Grand Stand. President Fallieres is in the centre leaning on the edge of the box, following the flyers through field-glasses, whilst to his right is Madame Fallieres, General French and General le Brun (French Minister of War), and on his left are M. Briand (Minister of the Interior), and M. Deutsch de la Meurthe.

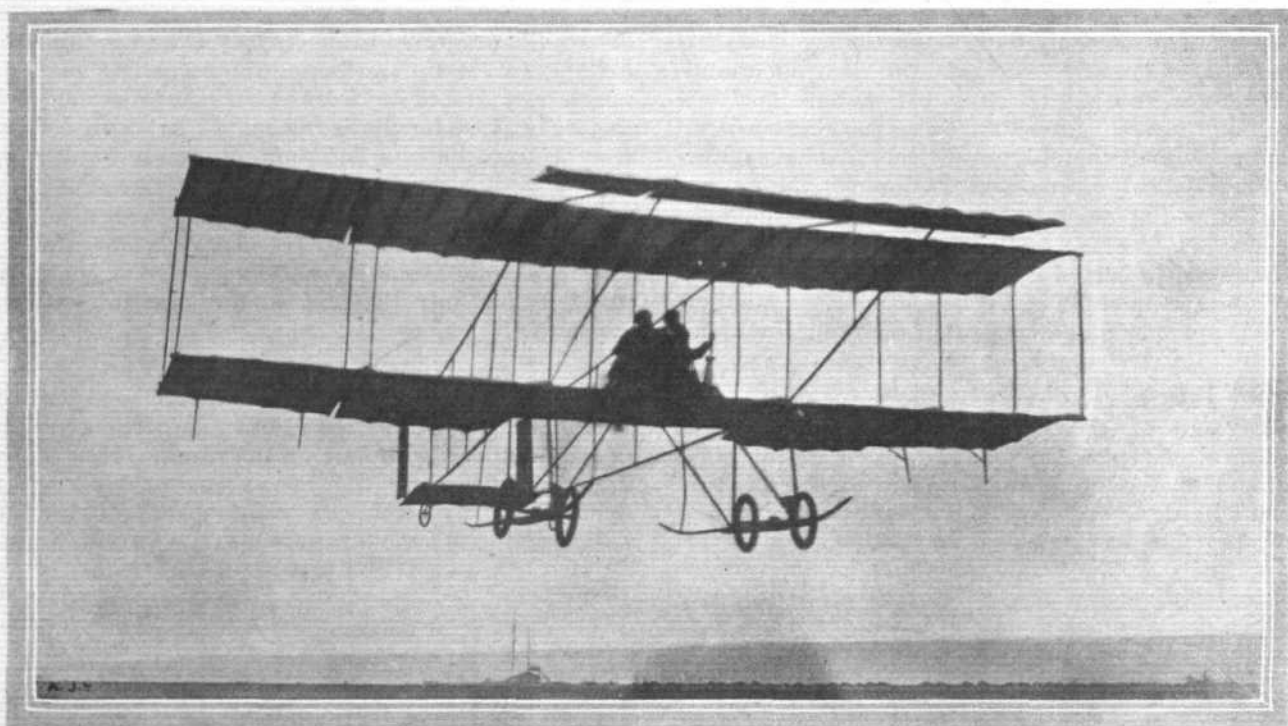
RHEIMS AVIATION MEETING.

Thursday's Doings.

IN our last issue we had to break the story of the flying at Rheims just at the point where Latham had succeeded in bettering Paulhan's record for distance made on the previous day. This wonderful flight of the Antoinette monoplane was, of course, the outstanding feature of that day; in fact, it might be called an "Antoinette" day, for in the morning Latham, on his No. 13 machine, flew for 70 kiloms., beating all records for speed. At the start he had notified his intention of running for the Grand Prix, but something going wrong with one of his planes he had to come down after seven laps. Not to be denied so easily, he brought out his No. 29 in the afternoon, and once more started off, circling round the track until his 65 litres of petrol was exhausted, when he glided to earth, after covering 154.5 kiloms. in 2h. 17m. 21 $\frac{2}{3}$ s. Count Lambert also made a flight for the Grand Prix, his supply

extraordinary, too, that such success should have been obtained, in view of the fact that the installation of the new Gnome motor was only completed 40 minutes before the time set as the limit for starting. However, the change proved grandly successful, and Farman kept up in the air until well after the official time for declaring the meeting at an end for the day. As will be seen from our tables he was officially credited with having flown 180 kiloms. in 3h. 4m. 56s., but as a matter of fact he only missed completing another lap by a few yards. But the clock had chimed half-past seven, and the official eyes were closed.

The day's proceedings were varied a little by the appearance of the dirigibles "Col. Renard" and "Zodiac." Latham in the course of a trial for the Grand Prix flew close under the car of the former. Paulhan intended trying to regain the world's record, but was rendered *hors de*



During the "Passenger Contest" at Rheims on Sunday last, Henry Farman, in addition to his other triumphs, carried two passengers, besides himself, for one of the circuits of the course. Our photograph shows him in full flight under these conditions.

of fuel only carrying him 116 kiloms. in 1h. 50m. 59s. Two mishaps occurred during the day. The first was through the engine on Rougier's machine stopping, whereby he made a sudden drop among the crowd, fortunately without seriously injuring anyone. Several were very much scared, however, by finding themselves brought so suddenly into close quarters with the biplane. The second incident was when Bleriot, at the end of his third flight with a passenger, lost control of his machine through the steering-gear failing. The result was a crash into the fence, again fortunately without any serious injury to anyone. Several short flights were made during the day by Legagneux on Capt. Ferber's Voisin, Tissandier, Sommer, Cockburn and Curtiss, the latter covering 30 kiloms. in an attempt for the Grand Prix.

Friday's Record.

Farman's record-breaking attempt for the Grand Prix of course overshadowed all else on Friday. It was

combat by a mischance. In order to avoid collision with Delagrange he made a sudden drop, with the result that the left side of his machine came into violent contact with the ground and was crumpled up. Both Latham and Tissandier made good flights, each completing ten laps, and Bleriot at his first attempt for the Grand Prix traversed 40 kiloms. in about 40 mins. During the day the weather was perfect, and most of the prominent flyers made trials. At the start of Farman's great flight the unusual sight was witnessed of three machines passing each other vertically. Sommer was at the bottom, Farman passed over him, and Latham, travelling much faster, flew by on top.

Saturday's Great Race.

Saturday's programme contained the *pièce de résistance*, for the first International competition for the Gordon-Bennett Aviation Trophy was to be run for on this day. It was a splendid day for flying as there

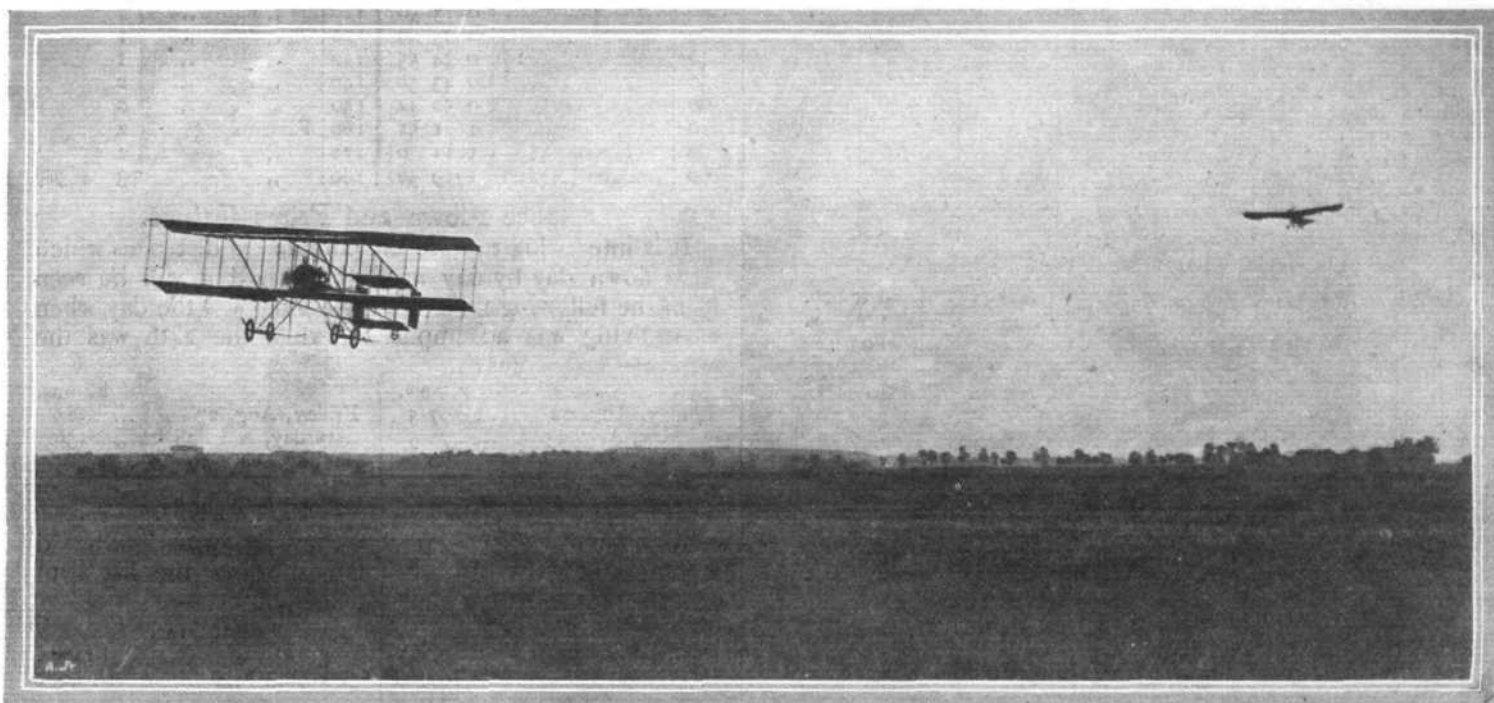
was only a breath of wind. The proceedings opened soon after ten, when Curtiss brought out the machine on which American hopes were fixed, and made a trial for the Circuit Prize. He succeeded in lowering the record to 7 mins. 55 $\frac{2}{5}$ secs. Then, finding his machine running well, he determined to make his cast for the great event. The two laps were covered in 15 mins. 50 $\frac{2}{5}$ secs., and this time not being bettered, the Cup crosses the "herring pond," and the next contest for it will have to be held in America. Cockburn, the British representative, made the next attempt, but he was unable to complete one lap. Lefebvre led the way for France, but he was nearly five minutes too slow. Latham and Bleriot did not make their attempts until the afternoon, when the cross-Channel hero just failed to keep the trophy in France. His first lap time was the same as Curtiss' second, but during the second round he was impeded by a squall, which made him some ten precious seconds slower. His total time was 15 mins. 56 $\frac{1}{5}$ secs., while Latham's was 16 mins. 32 secs. Bleriot, however, secured one trophy, that for the fastest circuit, by com-

attempt to capture the prize, but alas, his hopes were soon dashed to the ground. He brought out his fastest machine, but at the far end of the course a sudden descent caused some flexible petrol connections to break. In some way the petrol became ignited, and a few moments later the racer was a wreck. Fortunately, Bleriot was able to get clear, but not before his hand had got badly burned.

As will be seen from our tables, several other flyers made attempts for the Circuit and Speed Prizes, but nothing transpired entailing a change in the position of the leaders.

On each day during the week attempts were to have been made for the Dirigible Prize, a race over five laps of the circuit, but it was not till the last day that the "Col. Renard" made its attempt. Its time for 50 kiloms. was 1 hr. 19 mins. Later the "Zodiac" went round, but was unable to better the time, so the "Col. Renard" secured the prize.

The sensational feature of the day was the contest for the Altitude Prize, for which Latham, Paulhan, Farman



ONE OF THE RACING EPISODES DURING THE RHEIMS AVIATION MEETING.—Farman, on his biplane, giving a good lead to Latham on his Antoinette monoplane.

pleting the course in 7 mins. 47 $\frac{2}{5}$ secs., a figure which was not bettered. The other events of the day were the competition for the Passenger Prize, which was eventually won by Farman, the only aviator to carry two passengers, second place also going to him for the best flight with one companion. Lefebvre covered one lap accompanied by a friend.

The Final Day.

The contests for the two big prizes being over, Sunday, the last day of the first successful flying meeting, was earmarked for the final attempts for the Circuit and Speed Prizes, while the Height Competition also formed part of the day's programme. Ideal weather prevailed, and it was anticipated that an exciting duel would be witnessed between Curtiss and Bleriot for the Speed Prize. Curtiss placed himself in front by completing the course in 24 mins. 15 $\frac{2}{5}$ secs. Although he had to submit to a penalisation of 5 per cent. for a previous attempt, he still proved to be the best thus far. Bleriot made a determined

and Rougier competed. Latham made the most impressive flight, and when he returned to *terra firma* it was found that his barometer registered 155 metres (504 feet) the next best being Farman with 110 metres (358 feet). Although other attempts at flight were made they were of little interest after these wonderful performances, which concluded the Rheims Flying Week.

Closing Scenes.

On Monday, the proceedings were officially brought to a conclusion with a banquet offered by the organisers to the competitors, journalists, and others who had taken part. The Marquis d'Polignac presided, and among the honoured guests present were the Mayor of Rheims, Mr. Roger W. Wallace, Chairman of the Aero Club of the U.K., and Mr. Cortland F. Bishop, President of the American Aero Club. Mr. Hubert Latham, on behalf of the competitors, tendered their thanks for the splendid organisation of the meeting, which it was announced would be repeated next year.

TABULATED PERFORMANCES, &c., OF RHEIMS MEETING.

Grand Prix de la Champagne et de la Ville de Reims (Distance Flown).

Place.	Pilot.	Aug. 25. k.	Aug. 26. k.	Aug. 27. k.	Place.	Pilot.	Aug. 25. k.	Aug. 26. k.	Aug. 27. k.
1	H. Farman ...	—	—	180	7	R. Sommer ...	—	—	60
2	H. Latham (29) ...	—	154	—	8	L. Delagrangé ...	—	—	50
3	L. Paulhan ...	131	—	—	9	L. Bleriot ...	—	—	40
4	De Lambert ...	—	116	—	10	G. Curtiss ...	—	30	—
5	H. Latham (13) ...	31	70	111	11	Lefebvre ...	—	—	21
6	P. Tissandier ...	—	—	110					

Grand Prix Intermediate Times.

	Farman.			Latham (No. 29).			Paul- han.			De Lambert.			Latham (No. 13).			Tissan- dier.			Latham (No. 13).		
kil.	h.	m.	s.	h.	m.	s.	h.	m.	s.	h.	m.	s.	h.	m.	s.	h.	m.	s.	h.	m.	s.
10	0	10	28 $\frac{2}{3}$	0	9	22 $\frac{1}{3}$	0	12	16 $\frac{2}{3}$	0	9	45 $\frac{1}{3}$	0	8	54 $\frac{2}{3}$	0	9	36 $\frac{1}{3}$	0	8	32
20	0	20	29 $\frac{1}{2}$	0	18	51 $\frac{1}{2}$	0	24	10	0	19	34	0	17	48 $\frac{1}{2}$	0	19	15 $\frac{1}{2}$	0	17	6
30	0	30	47 $\frac{1}{3}$	0	27	41	0	35	58 $\frac{2}{3}$	0	29	28 $\frac{1}{3}$	0	26	45	0	28	46 $\frac{2}{3}$	0	25	50 $\frac{1}{3}$
40	0	40	54 $\frac{2}{3}$	0	36	15 $\frac{2}{3}$	0	48	13 $\frac{2}{3}$	0	39	32	0	35	26 $\frac{2}{3}$	0	38	22 $\frac{2}{3}$	0	34	55
50	0	51	21 $\frac{1}{3}$	0	44	48	1	0	31 $\frac{2}{3}$	0	49	44 $\frac{1}{3}$	0	44	23	0	47	53 $\frac{1}{3}$	0	43	56
60	1	1	35 $\frac{2}{3}$	0	53	50 $\frac{2}{3}$	1	12	55 $\frac{1}{3}$	0	59	47	0	53	18 $\frac{1}{3}$	0	57	44 $\frac{2}{3}$	0	52	44
70	1	11	35 $\frac{1}{3}$	1	3	6	1	25	8 $\frac{2}{3}$	1	10	14	1	2	28	1	7	39	1	1	51
80	1	21	38 $\frac{1}{3}$	1	11	26 $\frac{1}{3}$	1	37	58	1	20	35 $\frac{1}{3}$	1	11	0 $\frac{1}{3}$	1	17	39			
90	1	31	45 $\frac{2}{3}$	1	19	56 $\frac{2}{3}$	1	50	37 $\frac{2}{3}$	1	30	5 $\frac{2}{3}$	1	20	27 $\frac{2}{3}$	1	27	18			
100	1	41	47 $\frac{1}{3}$	1	28	17	2	4	33	1	41	3	1	29	20 $\frac{1}{3}$	1	37	9			
110	1	52	3	1	36	46	2	16	0	1	50	59 $\frac{1}{3}$	1	38	5 $\frac{1}{3}$	1	46	52			
120	2	2	31 $\frac{2}{3}$	1	45	33	2	28	36												
130	2	12	46 $\frac{1}{3}$	1	54	29	2	40	0												
140	2	22	51 $\frac{1}{3}$	2	3	54															
150	2	33	10	2	13	9 $\frac{2}{3}$															
160	2	43	35 $\frac{2}{3}$																		
170	2	54	4 $\frac{1}{3}$																		
180	3	4	56 $\frac{2}{3}$																		

Prix de la Vitesse (3 laps = 30 kiloms.).

Place.	Pilot.	Aug. 22. h. m. s.	Aug. 24. m. s.	Aug. 29. m. s.
1	Curtiss ...	—	—	(a) 23 29 (b) 25 39 (a) 24 15 (b) 26 40 (a) 25 18 (b) 26 33
2	Latham (29) ...	—	—	
3	Tissandier ...	0 28 59		
4	Lefebvre ...	0 29 2		
5	Lambert ...	0 29 0		30 34
6	Latham (13) ...	—	(a) 30 2 (b) 31 32	(a) 26 32 (b) 29 11
7	Paulhan ...	0 32 49	38 12	
8	Bunau-Varilla ...	—	—	40 6
9	Sommer ...	1 19 33		

a = real time.

b = penalised time.

Prix de Tour de Piste (1 lap = 10 kiloms.).

Place.	Pilot.	Aug. 22. m. s.	Aug. 23. m. s.	Aug. 24. m. s.	Aug. 25. m. s.	Aug. 26. m. s.	Aug. 27. m. s.	Aug. 28. m. s.	Aug. 29. m. s.
1	L. Bleriot ...	—	8 42	8 4	—	—	11 52	7 47	
2	G. Curtiss ...	—	8 35	—	8 11	9 31	8 9	7 55	7 49
3	H. Latham ...	9 47	9 13	—	—	8 32			
4	Lefebvre ...	8 58							
5	H. Farman ...	—	9 6						
6	P. Tissandier ...	9 26	—	—	—	9 35			
7	De Lambert ...	9 33							
8	Legagneux ...	—	—	—	—	9 56			
9	L. Paulhan ...	10 50							
10	L. Delagrangé ...	—	—	—	—	—	—	11 3	
11	R. Sommer ...	11 24							
12	G. B. Cockburn ...	11 44							
13	E. Bunau-Varilla ...	—	13 30						

Gordon-Bennett Race.

Place.	Pilot.	Country.	First Round. m. s.	Second Round. m. s.	Total. m. s.
1	G. H. Curtiss ...	United States	7 57	7 53	15 50
2	L. Bleriot ...	France	7 53	8 3	15 56
3	H. Latham ...	France	8 51	8 41	17 32
4	Lefebvre ...	France	9 45	11 1	20 47
5	G. B. Cockburn ...	Great Britain			

Prix des Passagers (10 kiloms.).

Place.	Pilot.	No. of Passengers.	Time. m. s.
1	H. Farman ...	2	10 39
2	H. Farman ...	1	9 52
3	Lefebvre ...	1	10 39

Prix de l'Altitude.

Place.	Pilot.	Height Reached.
1	H. Latham ...	155 metres (508 feet)
2	H. Farman ...	110 " (363 ")
3	L. Paulhan ...	90 " (295 ")
4	H. Rougier ...	55 " (180 ")

Prix des Aeronats (50 kiloms.).

Place.	Pilot.	h. m. s.
1	H. Kapferer, "Col. Renard" ...	1 19 49
2	H. de la Vaulx, "Zodiac" ...	1 25 1

World's Speed Records to Date.

Dis. tance.	Holder.	Time. h. m. s.	Dis. tance.	Holder.	Time. h. m. s.
10	Bleriot ...	0 7 47	100	Latham (No. 29)	1 28 17
20	Curtiss ...	0 15 50	110	" "	1 36 46
30	" "	0 23 29	120	" "	1 45 33
40	Latham (No. 13)	0 34 55	130	" "	1 54 29
50	" "	0 43 56	140	" "	2 3 54
60	" "	0 52 44	150	" "	2 13 9
70	" "	1 1 51	160	Farman	2 43 35
80	" "	1 11 0	170	" "	2 54 4
90	Latham (No. 29)	1 19 56	180	" "	3 4 56

Distance Flown and Prizes Gained.

It is interesting to note the cumulative distances which were flown day by day at Betheny, and it will be seen from the following table that the 27th was the day when most flying was accomplished, while the 24th was the worst:—

	kiloms.		kiloms.
Sunday, Aug. 22	307.5	Friday, Aug. 27	585
Monday, Aug. 23	278.5	Saturday, Aug. 28	156
Tuesday, Aug. 24	70	Sunday, Aug. 29	425
Wednesday, Aug. 25	205		
Thursday, Aug. 26	435.6	Total for eight days...	2,462.6

With regard to the prize-money, this was distributed among eight aviators, Farman heading the list with 63,000 francs. The details are as follows:—

FARMAN.	Francs.	PAULHAN.	Francs.
1. Grand Prix ...	50,000	3. Grand Prix ...	10,000
1. Prix des Passagers ...	10,000		
2. Prix de l'Altitude ...	3,000		
Total ...	63,000		
LATHAM.	Francs.	TISSANDIER.	Francs.
2. Grand Prix ...	25,000	6. Grand Prix ...	5,000
1. Prix de l'Altitude ...	7,000	3. Prix de la Vitesse ...	3,000
5. Grand Prix ...	5,000	Total ...	8,000
2. Prix de la Vitesse ...	5,000		
Total ...	42,000		
CURTIS.	Francs.	BLERIOT.	Francs.
1. Gordon-Bennett ...	25,000	1. Prix du Tour de Piste	7,000
1. Prix de la Vitesse ...	10,000		
2. Prix du Tour de Piste	3,000		
Total ...	38,000		
	Francs.	LAMBERT.	Francs.
		4. Grand Prix ...	5,000
	Francs.	LEFEBVRE.	Francs.
		4. Prix de la Vitesse ...	2,000

Particulars of Leading Machines.

Pilot.	Machine.	Material of Planes.	Engine.	Ignition.
G. H. Curtiss	Curtiss	—	Curtiss	Bosch mag.
H. Farman	Farman	Farman	Gnome	Bosch mag.
Bleriot	Bleriot	Continental	E.N.V.	—
Latham	Antoinette	Michelin	Antoinette	—
Paulhan	Voisin	Continental	Gnome	Bosch mag.
De Lambert	Wright	Continental	Wright	Eisemann.
Other Voisin pilots used E.N.V. (Rougier) and Itala (Fournier) engines. Other Bleriot machines had Anzani motors.				

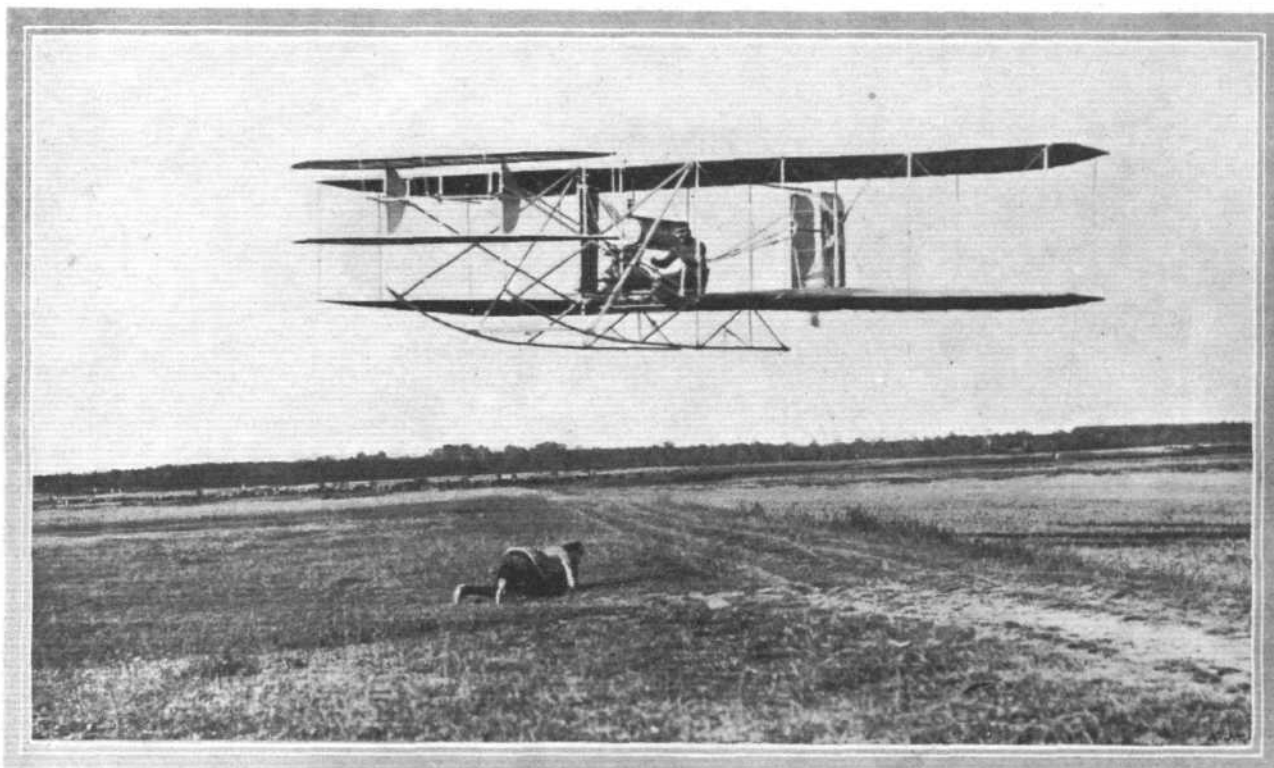
THE FLYING RACES AT RHEIMS.

BEING A GOSSIP ABOUT AN HISTORICAL MEETING THAT MARKS AN EPOCH IN THE DEVELOPMENT OF AERIAL LOCOMOTION.

By H. Massac Buist.

PROBABLY not more than two thousand Britishers, at an outside estimate, witnessed the extraordinary flying machine race meeting that lasted eight days at Rheims. I was there only part of the time, and would not have missed that spectacle if it had cost ten times as much trouble and money. There have been all sorts of estimates as to the crowd. The lowest figure is half a million. But the fact is it is impossible to determine, for the throng stretched for miles and miles round the course. Whether the masses were ten, or twenty, or forty deep you could not tell. No military review has ever drawn such throngs in France. Considering the utterly unprecedented nature of the whole thing, the

favourable conditions possible were experienced by the competitors. In a word, it must not be assumed that at present anybody who buys an aeroplane can put up quite as good performances with it anywhere about Europe as were witnessed at Betheny a few days ago. Altogether, apart from physically favourable conditions too, it was very obvious what a deal depends on the pilot, for some who undoubtedly had good machines performed little or not at all with them, while others who had natural aptitude and machines that many deemed to be fairly indifferent, contrived to make them behave as though new life had been infused into them. The more one studied the meeting and the preparations in connection with it, the



Last week M. Lefebvre's (in his Wright flyer) sudden swoop down in passing under M. Paulhan's machine was recorded and the effect upon an enterprising Press photographer mentioned. In the above photograph the moment of this incident is depicted, as secured by the brother "photo-fiend."

organisation from every point of view was something to marvel at. It was a fortunate thing, too, that the weather improved daily, so that towards the end of the meeting the conditions were absolutely ideal. This point is worth bringing out, because, when so much of a really striking nature has been achieved, there is a risk, as the accounts published in the Press have witnessed, of running to the extreme and exaggerating. Let us not cozen ourselves that more has been done than has actually been accomplished. Of thirty-eight machines entered, scarcely more than a third that number ever rose off the vast plain of Betheny. Furthermore, for the bulk of the time there was practically no wind, while the absence of hollows and hills, of woods and villages, also furnished the competitors with ideal conditions for handling their machines. Again, from ten o'clock till about noonday there was flying, and as a rule it did not commence again till about four o'clock in the afternoon, so that it will be observed that the most

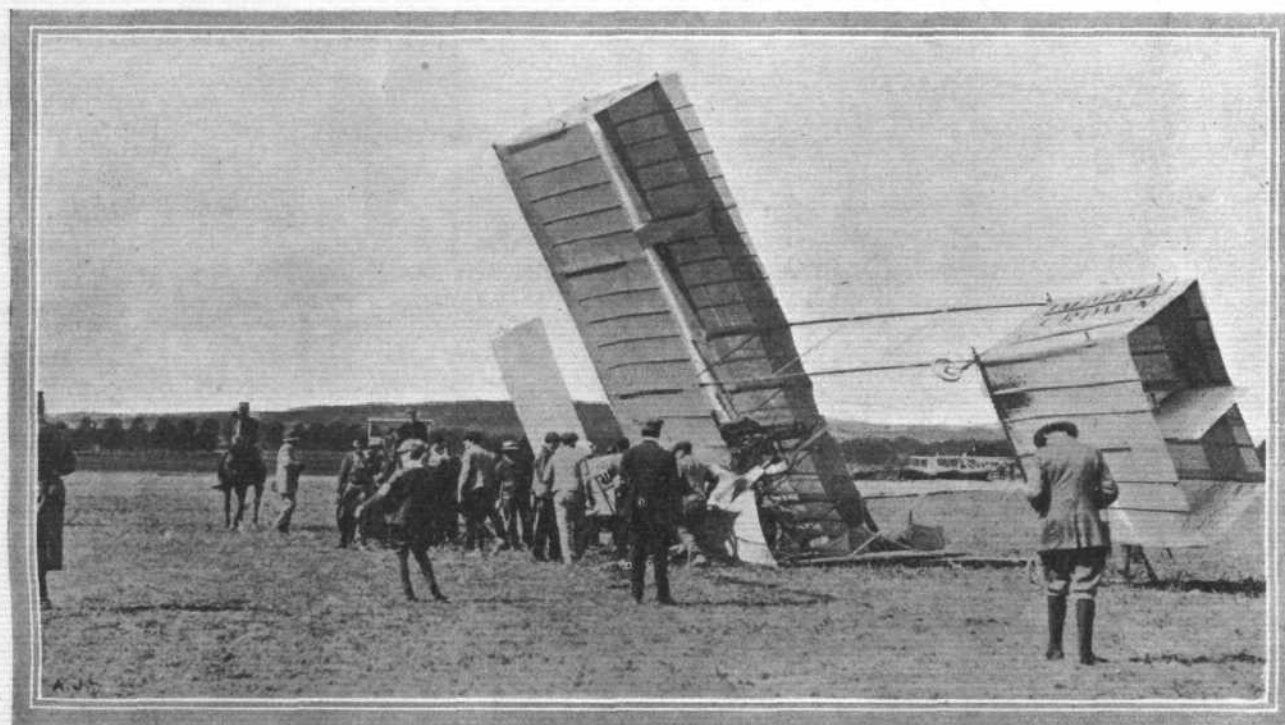
more one realised that the possession of an aeroplane is only part of the equipment at present necessary to flying. On the ground at Betheny each firm had a factory in little and a company of mechanics. Their work was no sinecure.

In conversation on returning, here one finds that scarcely the least realisation of what the meeting proved obtains in Britain. Here it is thought that we who went over there as enthusiasts before we arrived on the ground were so delighted at what we saw that our imaginations enabled us to regard everything as though it were viewed through powerful field-glasses. It may be that the fault of this lies in the news of the meeting having been conveyed for the most part in one or other of two manners. Many of the accounts that have appeared in the Press have been jerky, uninspiring, none too accurate, considerably monotonous, and void of what one may call constructional narrative. At the other extreme there have been the gorgeous impressionist versions in con-

nection with which some facts are certainly rather amusing. For example, when a very interesting incident was occurring during the races, I offered my field-glasses to a man who was sending some very frothy impressions to a London paper. But judge my astonishment when, without raising his eyes from the paper on which he was writing, he told me that he was too busy to look! Those are the sort of people who are supposed to give you truthful ideas about what a meeting is really like. From ten o'clock in the morning till seven at night, with the exception of a luncheon interval, they sit at the table and write steadily, racking their brains for similes and gorgeous phrases all the time. Is it any wonder that the truth is ignored in about every fourth sentence? I cannot see the object of it, except that this is an age of "fake." As soon as we see people flying over here, the man in the street will be able to grasp that he has been hoodwinked here or there or in some other fashion. Meantime there is a section of the Press that has undoubtedly trained a

excellent. The arrangement of the meeting was extraordinary. In the case of any ordinary races, all the competitors can come to the line together, so that the public knows perfectly well which event is taking place. But the difficulties presented by a flying machine meeting are enormous. It had to be left to the individual competitor to choose the moment that seemed to him the most suitable for making his essay, or, at least, that moment which was the earliest by which he could get his machine into readiness for it. It may be that next year the Rheims flying races will see achievement advanced so far that definite hours can be fixed for the start of various events. That time will determine. Meanwhile, it is sufficiently gratifying that the success of the meeting from every point of view has assured that there will be a succeeding one next year.

It was decided wisely that each competitor must make a separate performance for each event. That is to say, if when running in the 30 kilom. or three-lap event you



WHAT A WRECKED BIPLANE LOOKS LIKE.—Henri Fournier's Voisin machine after his first accident.

large public to delight in nothing unless it is laid on with a trowel. For them the brush of the artist and the dainty slight strokes of truth count for nothing more than niggardliness—as you might say, a mere minging retailer's method of dealing with a proposition. While on the subject of the written version, too, it is certainly extraordinary that one great English daily paper employed an Italian with a florid style of writing to give a lengthy impressionist version day by day, and his ingenuity in discovering new similes was certainly amazing. What I consider vastly more clever, however, is the fact that his story was telegraphed over to London in Italian, then translated against time into English. The bulk of what credit there is for the version as published is certainly due to the ingenuity of the translator. Meantime, the Italian used to send a paltry little dispatch of a few hundred words only to his own paper in Italy every night. It is a strange age when we talk big about Tariff Reform and have to buy our imagination from Italy.

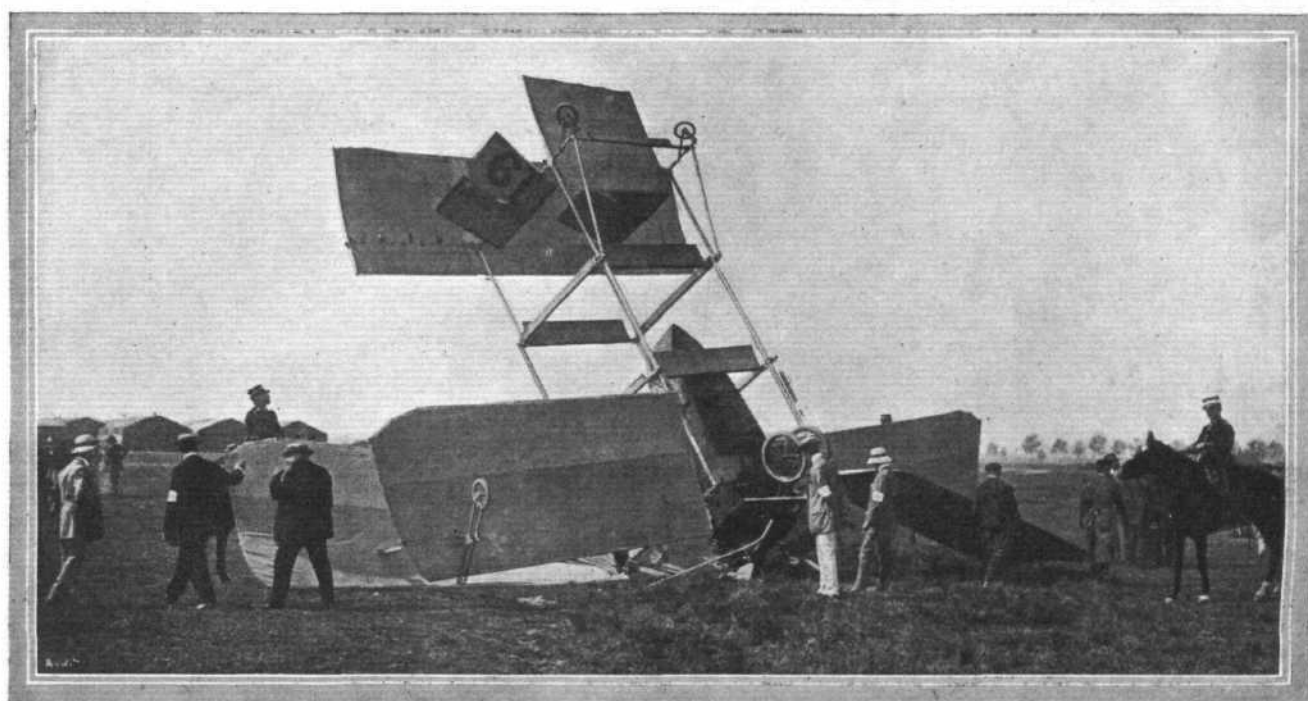
In view of the large crowds, the train, motor, bus, and cab services, and the feeding accommodation, were

put up one very fast circuit, your time for that circuit could not count for the fastest lap race, nor could any two of your three circuits count for the 20-kilom. Gordon-Bennett Race. Before starting on any given performance every competitor had to announce to the organisers which event he was going for, and his performance only stood him in stead for that particular event. The result was that the organisers had to devise a system of signalling from a flagstaff with yard-arms. It was done in colours and shapes, so that the signals told the onlookers whether there was flying or no flying, what event was being competed for, who was competing for it, whether the record had been beaten or not, whether a good or a bad start or landing had been made, when a landing had been effected without accident, whether the aid of mechanics was needed, whether a competitor had touched the ground during a flight, or had incorrectly negotiated a corner tower that marked the course, whether any previous sign set up was incorrect; also whether flying was probable, whether there was no flying, or whether there was about to be flying. The whole thing is about the most ingenious

imaginable, for by employing the system of signalling by signs representing numbers, a lot of miscellaneous information could be conveyed. For example, a white disc, a red pyramid, and a white oblong would mean, "Attention! Flights are about to commence." A white disc, a white oblong, and another white disc, representing the number 171, would mean that a breakdown of the motor had delayed the start. A white disc, a white oblong, and a white pyramid, representing the number 174, would mean that petrol was the cause of a breakdown. A white disc, a white oblong, and a red pyramid meant that the aeroplane had sustained damage to a wing. A white disc, a white oblong, and a red oblong, representing the number 179, would announce that a propeller had been changed; and, similarly, the arrival of the President of the Republic, of a Minister, or of a foreign sovereign, were news that could be conveyed to the public by the sign staff and the simple aid of the excellently printed official programme sold at one franc. That programme

and wind indicators, and the bulky dirigible balloons, were always most glaringly in evidence, owing alike to volume and to the bright yellow colour of the material used in their construction.

When one remembers that 10 minutes was about the average time occupied in completing a lap, and that during about two-thirds of that time one was unable to detect the machines with the naked eye, and, even through the most powerful glasses, the details of their flights were not perceptible, it will be realised that from the spectacular point of view, at any rate, a considerable change is desirable. In any case, now that the meeting has proved the possibility of machines floating one above another and racing side by side, the really interesting spectacular situations would be multiplied many fold by making the course half the length, so that the onlookers would have the machines in good view all the time, and would, therefore, be able to follow every incident throughout the racing. And the incidents of air racing are



WHAT A WRECKED BIPLANE LOOKS LIKE.—M. L. Breguet's Breguet machine after his smash-up in front of the Grand Stand on Sunday.

should be bought, studied, and practically copied in detail by any organisation attempting to run a flying machine meeting in Britain.

The course was a 10 kilom. (6·2 English statute miles) one, oblong in shape, being 3,750 metres parallel to the grand stand, and 1,250 metres in depth away from it. Therein lies one of the few points of the meeting that experience has now proved should be changed on the next occasion. An aeroplane is such a splendid scouting instrument that it becomes quickly lost to view. In that vast plain, even when following the flights through powerful field-glasses, it was often very difficult to pick out the machines after they had gone into far distance and attention had been diverted from them for a moment. Incidentally, I cannot understand why not one person in a hundred provided himself with glasses. The thing seems scarcely credible. Evidently the vast majority of those who attended the meeting had never seen a flying machine go into the distance before. Undoubtedly they would be very difficult objects to hit, whereas the spherical captive balloons that were used as mark buoys

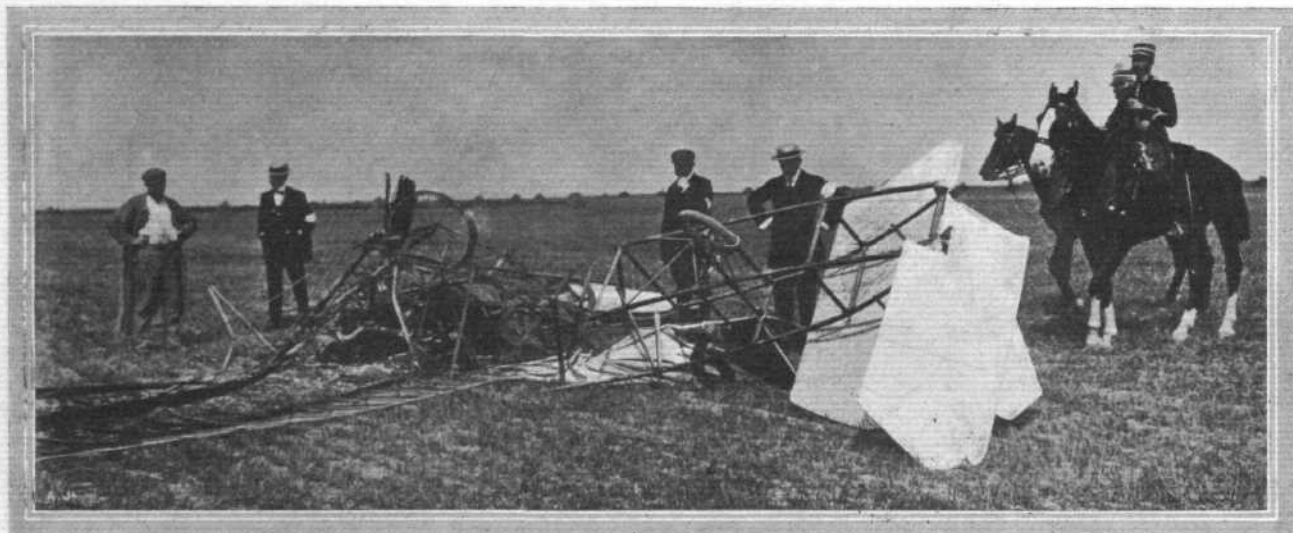
worth following. As a sport, it is plain that it will surpass everything in point of interest, being already to the full as exciting as steeplechasing. Some members of the organising committee told me that they were delighted to find that, though the magnificent plain at Betheny was so vast that the course could have been made easily double or treble the size, experience proved that from the spectacular point of view, and without in any way inconveniencing the competitors, it could be made half the size, otherwise 3 miles to the lap, which is amply sufficient when it is borne in mind that not one of the machines achieved a speed of 48 miles an hour, so that once or twice one perceived motor cars bumping along the plain at a faster rate than the aeroplanes could fly overhead. This proof that a 3-mile course is large enough must be greatly encouraging to aviation in England, for it means that an expanse like Brooklands, for example, if made suitable as by the complete clearing of the interior, would serve the purpose excellently well.

The other lesson that is to be learnt from the meeting, albeit writers do not seem to have realised it yet, is that

the time has now come for instituting some means of classification for aeroplane races. At Betheny, folk did not seem to realise that oftentimes they saw a machine that was going about five miles an hour faster than another one that was carrying the same weight with only half its horse-power, and about two-fifths of its wing surface. That is like expecting a carthorse to outgo a racehorse, a canal barge to be a match for a yacht, a bull-dog for a greyhound, or a voiturette for a full-scale racing motor car. Yet they did not realise that. We want either a division of the machines into classes or a system of handicapping. In either case the obvious means seems to be to make the basis horse-power employed, and wing-surface and weight carried. Such a means as this would be encouraging to the industry because it will educate the public as to the relative merits of different designs from the point of view of efficiency. Had such a system obtained at Rheims, folk would have come away with very different impressions as to the qualifications of the different machines.

Let us take a glance at the preparations that have to be made for flight. You must not think that aeroplaning

"Edouard!" to attract the attention of the foreman. The two would discuss the matter and decide what was to be done, what time neither M. Levavasseur or M. Latham would look over their shoulders. Such indifference towards machines of one's design and using seems absolutely extraordinary. But as soon as they were launched in flight, one could not but remark on the changed attitude of the designer, who scarcely ever took his eyes off them, regarding them with the fond affection of a father for his small children. Among the Farman contingent the mechanics were less numerous, but the aviators worked themselves. Nevertheless, I could not but conclude that in the main the Farman biplanes needed less attention than any of the others. Poor M. Esnault-Pelterie, with his injured hand, toiled all the week with his men at the task of preparing his clever red monoplanes for flight, but he was not able to take part with them in any event, which reveals incidentally how much labour precedes actual launching in the air; while the experiences of M. Bleriot in taking a header into the fence with one machine and having another burnt up, suggest that a good stock of aero-



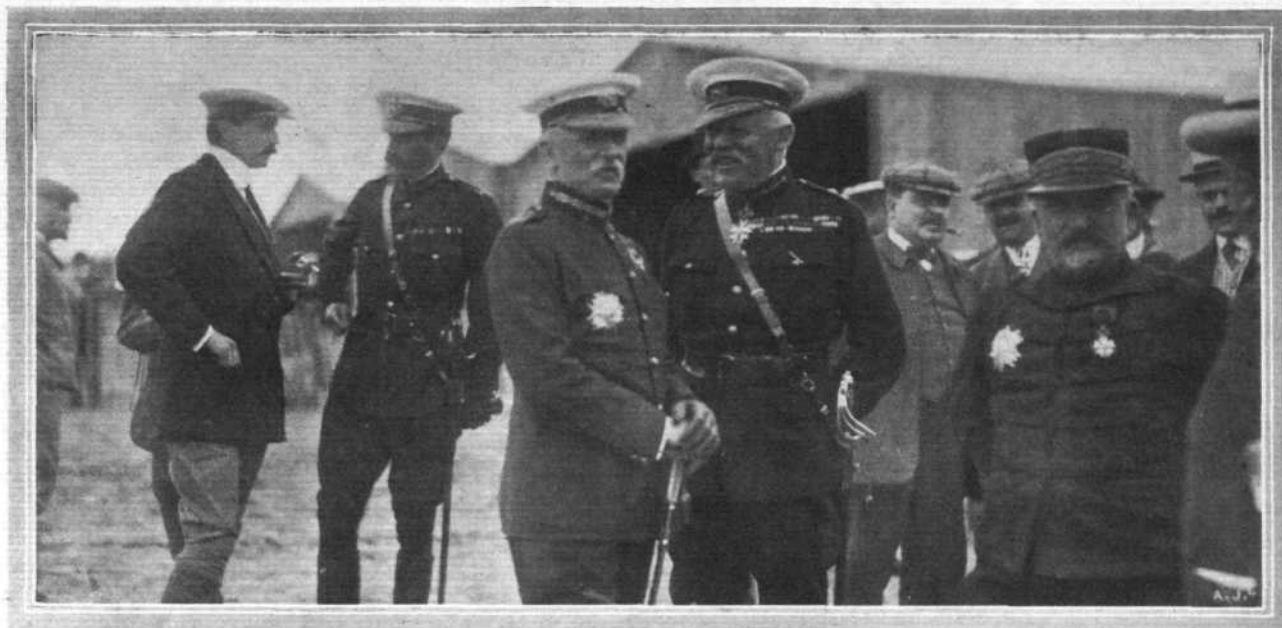
Viewing the still smouldering remains of the Bleriot monoplane (No. 22 in the Rheims contests) after the fire on Sunday last, which resulted from the ignition of the burst petrol-tank.

consists only in the seemingly effortless gliding through the air that you behold when seeing the machines in actual flight. Apart from the problem of design and of manufacture, there is at this early stage of the movement the almost continuous preparation and reparation, adjustment, repairing and tuning up of the machines before each flight. There is a company of mechanics for each team of machines, what one may style the most trained troupe being the Bleriot contingent, that were as smart as gunners at their work, never seeming to need any instruction. As in the case of the Antoinette management, M. Bleriot's foreman of mechanics rarely seemed to need any orders. In the sheds the machines were practically in his entire charge. The quickness and systematic fashion in which the Bleriot men worked was the admiration of all who studied them.

Quite one of the most interesting and fascinating characters of that meeting is the portly, rugged, impetuously good humoured M. Levavasseur. When his beloved aeroplanes were on the ground or in their sheds you might have concluded that they had no more to do with him than they had with M. Latham, or with any casual onlooker. If a mechanic discovered any part that he thought needed attention, he would shout

planes requires to be kept at headquarters if one wants to stand a likely chance of competing in any given event. Blue-eyed Gabriel Voisin, who does not fly, was busy with a troop of mechanics on his various biplanes, with one of which Fournier tried to do cartwheels sideways, with another of which Rougier, who had cut a very poor figure, surprised everybody at the last moment of the competitions by going in for the high flight and actually clearing the minimum height admissible, and with another of which the brilliant young mechanic, Paulhan—who was discovered by Mr. Harry Delacombe and won his machine in a competition of M.M. Voisin for the best design for an aeroplane, and who got his Gnome motor for it on the credit basis of undertaking to hand over half his prize money until he could pay for it—put up some surprisingly fine performances and showed what these machines are capable of in the hands of a born pilot.

There was always plenty of work going forward before any one of the "blooming appariels" had sortied from its hangar. Screws were being changed, or chains were being repaired, or torn wings were being sewn up, or, as in one case, the wings themselves were being clipped. That is to say, M. Bleriot did better with one of his



THE BRITISH MILITARY CONTINGENT AT RHEIMS.—Generals Sir John French, Grierson and Henderson, and on the right, the French Minister of War, General le Brun.

machines after he had cut an appreciable strip off the back of his planes.

In the hot hours of the day you would see mechanics sleeping between the sheds or under the shade cast by an aeroplane, while in the shed of M. Roger Sommer, Mr. Charles E. Grey beheld a "bonne" watching over the slumbers of his two

babies on a bed, their sleep being undisturbed until the engine was started up, when the thunder of the open exhaust that is an accompaniment of aeroplaning at present, put an end to their repose. "Papa," with his well-groomed beard and conspicuous white boots, can always be singled out from a throng.

(To be concluded.)



AEROPLANE CLUB OPEN MODEL FLYING COMPETITION.

ON Saturday, September 11th, the classes for the Open Model Flying Competition at Wembley Park will be:—

- (a) For models propelled by elastic, spring, or other form of static energy.
- (b) For models propelled by heat, petrol or steam engines, or other form of dynamic energy.

Each class will be sub-divided into:—

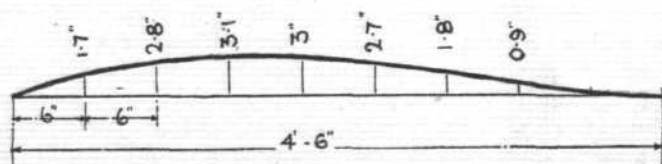
- (1) Machines with 1 sq. ft. of supporting surface or less.
- (2) Machines with more than 1 sq. ft. but less than 5 sq. ft. of supporting surface.
- (3) Machines with more than 5 sq. ft. but less than 12 sq. ft. of supporting surface.
- (4) Unlimited area of supporting surface.

Entry fees for Class (1), 2s. 6d.; Class (2), 5s.; Class (3), 10s.; Class (4), £1.



Glenn Curtiss' Victorious Flyer.

IN the issue of FLIGHT for July 3rd, a full description, with drawings to scale, was given of the Curtiss biplane,



which in the hands of its constructor has proved its remarkable qualities for stability and for speed by, amongst other performances, winning the Gordon-Bennett Trophy in 15 mins. 50 $\frac{3}{4}$ secs. for the 20 kiloms., equivalent to a speed of 73.63 k.p.h. This description with dimensions should enable all interested in practical work to study a machine which has accomplished such good work. We also now give a line drawing showing the exact camber

Fifty per cent. of these fees will be returned for each model which actually starts in the competition.

If less than three machines enter in one class, that class will be declared void and entry fees will be returned.

Prizes will consist of the entry fees and of various presented prizes, which will be duly announced in the programme.

The programme of events is as follows:—

- (i) Longest total flight in straight line with and against the wind.
- (ii) Fastest flight over a measured distance to be decided on the day of the competition, also with and against the wind.
- (iii) Longitudinal stability prize (for the best landing after a flight).
- (iv) Longest glide when launched from a given height without power and with propellers attached.
- (v) Steering competition (to fly between fixed points).
- (vi) Greatest height prize.



of the main plane chord, which in our article of July 3rd was omitted.

The Gnome Flight Engine.

MESSRS. GAUTHIER AND CO., of 8, Great Marlborough Street, Regent Street, who are the sole agents in this country for the Gnome engine, which has made such a remarkable name for itself in aviation at the Rheims meeting, inform us that they will be pleased to supply their standard Gnome engines to English aviators at special prices, so as to be a slight inducement to those now constructing aeroplanes. It must be understood, of course, that this offer will not be open indefinitely.

At the present moment, the firm inform us that they are in the unique position of being able to deliver standard engines, as supplied to the leading French aviators, in about two months from date of order. They are now also manufacturing a 30-h.p. 5-cyl. engine which is considerably cheaper than the 50-h.p. model.

AERO CLUB OF THE UNITED KINGDOM.

OFFICIAL NOTICES TO MEMBERS.

Fixtures for 1909.

September 5-20 Brescia Aviation Meeting.
September 25... International Aeronautical Exhibition, Paris.
October 3 ... Gordon-Bennett Balloon Race, Zurich.

Baron de Forest £4,000 Prize.

Under the Rules of the International Aeronautical Federation.

Baron de Forest has offered through the Aero Club of the United Kingdom a prize of £4,000, to be competed for under the following conditions:—

1. The winner to be the aviator who, from a point fixed upon by himself, and approved by the Aero Club, flies the longest distance from England to the Continent, the distance to be measured from the starting point to the point of descent.
2. No part of the machine shall touch land or water during the flight.
3. The competition to be open from January 1st, 1910, until December 31st, 1910.
4. The flight must be accomplished by means of a machine of the type designated "heavier-than-air."
5. The complete machine, i.e., the motor, planes, propellers, and all other parts thereof, must have been entirely constructed within the confines of the British Empire. This shall not be held to apply to raw material.
6. The entrant, who must be the person operating the machine, must be a British subject, and domiciled in Great Britain or the Colonies or dependencies thereof for a period of at least two years prior to January 1st, 1910.
7. The flight must be commenced in the presence of official observers appointed by the Aero Club.
8. Formal notice of entry must be sent to the Secretary, Aero Club, 166, Piccadilly, W., not less than one month before the proposed flight, and the entrant must comply with all the regulations as to notices, observations, and other details issued from time to time by the Aero Club.
9. In every case, notification of the first attempt to be made, under these conditions, must reach the Aero Club, 166, Piccadilly, W., not less than forty-eight hours prior to such attempt, and in the case of all subsequent attempts, not less than twenty-four hours' notification must be given.
10. The entrant must supply satisfactory evidence of previous flights before making any attempt under these conditions.
11. The competitor must supply satisfactory evidence of the exact point of descent, signed by two witnesses, whose signatures must be attested.
12. In accordance with the rules of the International Aeronautical Federation, the entrant must be a member of, or obtain a permit from, the Aero Club of the United Kingdom.
13. Should any questions arise at any time after the date of entry as to whether a competitor has properly fulfilled the above conditions, or should any other question arise in relation to them, the decision of the Committee of the Aero Club shall be final and without appeal.
14. Each competitor agrees to waive all claim for injury either to himself or his apparatus, and agrees to assume all liabilities for damage to third parties or their property, and to indemnify the Aero Club against any such claims.

International Aeronautical Federation.

The annual Congress will take place at Zurich, commencing October 1st. The delegates representing the Aero Club of the United Kingdom will be nominated at the next Committee Meeting.

Gordon-Bennett Balloon Race.

The International Race will take place at Zurich on October 3rd, and the following countries will be represented:—

America.	England.	Germany.	Spain.
Belgium.	France.	Italy.	

Bleriot Monument.

The Committee of the Aero Club have decided to erect a monument in the Northfall Meadow at Dover, marking the exact spot where Bleriot alighted. The ground being Government property, the War Office has been asked to grant the necessary permission.

Rheims Aviation Week.

The special excursions to Rheims arranged by the Aero Club were largely patronised by the general public, and those who made the journey were well repaid by the wonderful performances accomplished on the Saturday and Sunday. A full report of the Rheims Aviation Week appears in another column.

Club House at Shellbeach Flying Ground.

The Committee of the Aero Club are proposing to take over Muscle Manor for a Club House on the flying ground. In order that this may be effected, and in view of the very large expenditure which has already been made at Shellbeach, the Committee appeal to the Members for special subscriptions for this purpose. The Golf Course will be taken over for the use of Members, together with the shooting rights extending over 1,000 acres.

The following sums have already been promised:—

Frederic Coleman, £10; Frank McClean, £10;
Hon. Maurice Egerton, £10; H. Massac Buist,
£2 2s.

Erection of Sheds.—Members wishing to erect sheds at Shellbeach are requested to apply to the Secretary, who will supply all information.

Members visiting the flying ground are requested to have with them their membership cards, as strict instructions have been given to admit only Members to the flying ground.

Railway Arrangements.—The following reduced fares have been arranged with the railway company for members visiting Shellbeach:—

1st Class return, 8s.; 2nd Class return, 6s. 6d.; 3rd Class return, 5s.

Tickets available for one month from date of issue.

Members desiring to avail themselves of these reduced fares are required to produce vouchers at the booking offices. Vouchers can be obtained from the Secretary of the Aero Club. Trains leave Victoria, Holborn, or St. Paul's.

For the convenience of Members, the best train is the 9.45 a.m. from Victoria, arriving at Queenborough 10.55. At Queenborough change to the Sheppey Light Railway for Leysdown (Shellbeach), which is $\frac{3}{4}$ mile from the flying ground.

HAROLD E. PERRIN, Secretary.

166, Piccadilly, W.

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Manchester Aero Club.

MR. STAFFORD THRELFALL, the hon. sec., announces that the preliminary committee, finding that it was impossible to complete the necessary arrangements for a general meeting on Wednesday last, have postponed the meeting until Thursday next, September 9th, at the Midland Hotel. Draft rules, agenda, and full particulars are now in preparation. Mr. Stafford Threlfall's address is 9, Albert Square, Manchester.

Leicestershire Aero Club Formed.

ON Monday last, at a meeting held at the Bell Hotel, Leicester, the formation of the Leicestershire Aero Club was definitely decided upon. Sir Samuel Faire presided at the meeting, and a committee was formed. Baron de Forest was elected President, and Mr. S. W. Shaw undertook the duty of hon. secretary.

AVIATION NOTES OF THE WEEK.

Baron de Forest's £4,000 Prize.

OUR readers will find under the "Aero Club Notes" on page 542, the full regulations drawn up by the Aero Club governing the competition for the prize of £4,000 offered by Baron de Forest for a Cross-Channel flight.

Cross-Country Flight by Mr. Cody.

PROGRESS still continues to be made by Mr. Cody at Aldershot, and on Saturday last he made his best performance so far by flying across country. Altogether four trips were carried out during the evening. In the first, in which he was unaccompanied, a distance of about four and a half miles was traversed. This was followed by a couple of flights with a passenger, each time a mechanic having the honour. The last "jaunt" of the day was the best. After crossing Laffan's Plain, the Basingstoke Canal, and Claycart Common, he flew along the Long Valley to Jubilee Hill. Rounding this, the Long Valley was again crossed diagonally to Long Hill, and then the course was over the Canal again to Eelmoor Hill. An altitude of about 100 ft. above the ground was reached at this point, where a number of admiring spectators spontaneously cheered Mr. Cody. He finished his fine effort by making a complete circuit of Laffan's Plain, and finally came to rest a few yards from his shed.

Brooklands for Flyers.

IT seems almost a natural corollary that amongst the sporting members of the Brooklands Automobile Racing Club there should be a number of men whose minds are turning to the fascination of aviation. Several, in fact, are already on the road to become future flyers, some four getting near the stage of making trials before long. Mr. Hammond has had his machine in hand on the ground for some little time now, and others who may be heard of shortly have arranged for Bleriot and Antoinette flyers. For trial purposes the Brooklands grounds should be useful, and as progress is made it should be possible to arrange some extended flights round the "bowl."

Edinburgh Museum and Aviation.

ALREADY the Royal Scottish Museum at Edinburgh have the nucleus of a very good section relating to aviation, having secured duplicates of the Lilienthal and Pilcher gliders, and a model of the Wright flyer. They have also under construction a model of the machine in which Bleriot crossed the Channel; both this and the Wright model being made to a scale of one-eighth full size.

Flying Week at Blackpool.

THE authorities of Blackpool, ever on the alert for an opportunity to advertise their town, have been fired with an ambition to hold an aviation meeting in October. In order to see what could be done in the matter, a deputation consisting of the Mayor (Councillor Fielding), and Councillor Parkinson, with Messrs. Brodie and Noden, paid a visit to Rheims last week-end. As a result of these investigations a report will be laid before the Town Council, who have already agreed to the proposal in principle. At a meeting of the Town Council on Wednesday evening, it was decided to go on with the organisation of the meeting with a view to its being held during October. It is probable that the value of the prizes

offered will exceed £5,000. Already Councillor Parkinson has, as our readers will call to mind, shown a keen interest in aviation, and is expecting at an early date delivery of a Bleriot monoplane.

Bleriot and Latham Match.

IT is announced by the Secretary of the Aeroplane Club that the contract for this match has been signed, and will take place at Wembley Park at a date to be fixed between October 15th and 30th. Rules governing the contest are to be drawn up by a committee representing the Aeroplane Club, the directors of Wembley Park, and the International Federation.

There are to be five flights, to start between 2 p.m. and sunset. The first section of the races will be divided into three portions, one of ten miles (which will be timed to 16 mins.), a twenty miles race (the time not to exceed 28 mins.), and the third of thirty miles, the time of which, to constitute a race, has not yet been decided upon. The prizes for the races will amount to £2,400 for the winner, and £600 for the loser. There is also to be a high-flight race, the winner to receive £1,600, and the loser £400. The competitors will be invited to take part in other races, and special attractions are to be offered to English aviators to bring English-made machines.

Presumably the "International Federation" refers to the Aero Club of the United Kingdom, who are the sole representatives in Great Britain of International aeronautical affairs. It is, however, very doubtful whether Wembley Park is a suitable place for a meeting of this character, and it is to be hoped that the Joint Committee, when appointed, will duly consider the responsibilities involved when deciding this point.

What we hardly understand, however, in view of the statement that the contract is signed, is M. Bleriot's very emphatic pronouncement to the Paris correspondent of the *Daily Telegraph* that he has signed nothing, and at present has little intention of doing so. Time, no doubt, will elucidate these little discrepancies.

The Curragh suggested for an Aviation Meeting.

MR. R. J. MECREDY has lost no time in following up the suggestion of Mr. Lloyd George, that Ireland was the most suitable place for a big aviation week. He writes from Dublin advocating the advantages of the Curragh, about 30 miles from Dublin, for such an event. He points out that "it is a level plain, nearly circular in shape, and measuring about 1½ miles in diameter. It is smooth, and covered with a very thick, short grass, which would render starting exceedingly easy. Apart from this it is intersected by several roads of good surface running flush with the grass, and which also would be most suitable for starting purposes. There are no trees on this plain, but one side of it is occupied by the military camp."

"On the whole I think it would be most suitable ground. The grand stand used in connection with the horse races would come in very useful to the spectators, and would enable the promoters to get a substantial sum from the gate."

£500 for Crossing the Firth of Forth.

A PRIZE of £500 is being offered by the directors of the Edinburgh Marine Gardens for the first British aviator who in a British aeroplane shall cross the Firth

of Forth, starting from the Marine Gardens, Portobello, and landing anywhere on the Fife coast. Flights may be made between 10 a.m. and sunset on any day provided notice has been given before noon on the previous day. For this year the offer only holds good to October 31st.

Another London to Manchester Entrant.

THERE are now four entrants for the London to Manchester prize of £10,000 offered by the *Daily Mail*, Mr. S. F. Cody having sent in his formal entry.

Aeronautic Lectures in London.

THE course of lectures and study in aeronautics, arranged by the Northampton Institute, commences on September 27th. The course will consist of four parts, lectures, drawing office work, laboratory work, and calculation classes. The lecturer will be Mr. L. W. Blin Desbleds, and he will deal with the history, theory, and practice of both the airship and aeroplane.

Banquet to M. Bleriot.

CAPTAIN WINDHAM writes us that any members of the Aero Club, Aeronautical Society, Aeroplane Club or Aerial League are very welcome to come to meet M. and Mme. Bleriot on September 15th at the Savoy Hotel, when the Lord Mayor presides. The tickets are 15s. Early application should be made to the Secretary, Aeroplane Club, Savoy Hotel, W.C.

Another Wright Pilot.

ON the sea-shore at Dunkirk, M. Baratreux, who has just obtained delivery of a Wright flyer, succeeded in making, on the 27th ult., a short flight of about 500 metres, including a turning. On landing, one of the skids was slightly damaged.

First Bleriot Flyer for Australia.

MR. FRED JONES, an Australian gentleman who is at present in this country, has ordered a Bleriot monoplane of the cross-Channel type, with which he hopes to fly in Australia. This will be the first monoplane to be imported into "the land of the Southern Cross." Mr. Jones is interesting himself considerably in aviation, and is anxious to get all particulars of aerial engines and other accessories for flyers.

Aviators' Patron Saint.

IN response to a request from some aviators, it is reported that the Rome ecclesiastical authorities have named the prophet Elijah as a suitable patron for flying men. A medal showing the prophet driving his chariot of fiery horses has been designed for the outward sign of those seeking saintly patronage.

Flying Week for Frankfort.

FEELING, doubtless, that they have been more or less placed in the background by the success of the Rheims meeting, the authorities of the Frankfort Aeronautical Exhibition have set about the organisation of a flying week, to take place from October 3rd to 10th. It is hoped by choosing these dates to induce the principal aviators to proceed to Frankfort at the conclusion of the Brescia meeting. Already it is announced that a dozen promises of active support have been obtained. Endeavours are also being made to induce Orville Wright to make some exhibition flights in the grounds.

A Meeting at Nice.

ALTHOUGH the proposal to hold an aviation meeting at Nice last winter fell through, active preparations are afoot for holding one during the coming season. The

Promenade des Anglais is being made longer and the California grounds altered so as to be suitable for the purpose, and it is hoped, by employing a large body of workmen, to have this work completed at the end of November. It is probable that prizes amounting to a value of 200,000 francs will be offered.

A Flying Week for Berlin.

AN attempt is being made to organise a flying week, to be held on a new aerodrome at Bornstedt, near Berlin, commencing on September 26th.

Another Town-to-Town Prize.

AT the next sitting of the Paris Municipal Council, M. Quentin Bauchant, representing Champs Elysées district, will move that the Council vote a sum amounting to £4,000 for a town-to-town prize. It is suggested that as the motor car industry derived such enormous benefit from the Paris-Bordeaux race, in a similar way aviation would reap considerable advantage from a race between those points or between Paris and Marseilles.

Competitions at Issy.

AN interesting suggestion has been made that a series of flying competitions should be organised at Issy during the second fortnight in October. In view of the large number of successful aviators who have received their initiation on this famous ground, to see them in active competition should be attractive. It is hoped that a prize fund of 10,000 francs will be easily raised.

"Le Matin" Offers a Prize.

ROUND the world motor car races are to be succeeded by races for aeroplanes. Our Parisian contemporary, *Le Matin*, which organised the Pekin to Paris and New York to Paris contests, announces that it is organising a race for aeroplanes over a circular course comprising Paris-Dijon-Belfort-Nancy-Lille-Paris, a distance of 900 miles. A first prize of £4,000 will be offered, and the event is to take place before the end of August, 1910.

Orville Wright in Germany.

THE first real flight with a heavier-than-air machine in Germany was made on Monday last when Orville Wright made a preliminary trial over the Tempelhof parade ground. He brought out the flyer between four and five o'clock in the morning, when there were very few civilians about, but the troops who were practising for the autumn manoeuvres suspended operations during the quarter of an hour that Orville Wright was in the air, and at its conclusion he was surrounded by enthusiastic officers, who heartily congratulated him. The public exhibitions were to commence on Thursday, and from a statement made by Orville Wright to the effect that his petrol reservoir holds sufficient for a four-hour flight, it seems not unlikely that he may attack the duration and distance records.

Mr. Latham to Visit Germany.

ORVILLE WRIGHT is not to be allowed to have it all his own way while in Germany, as it is reported that one of the large Berlin stores has arranged with Mr. Latham to visit the Ruhleben racecourse and make some exhibition flights there.

Obstruction of the Air.

UNDER the International regulations governing the Rheims aviation week, the pilot of the "Zodiac" dirigible airship was fined 100 francs for obstructing the airway of M. Delagrangé during one of his flights for the Grand Prix de la Champagne.]

AIRSHIP NEWS.

"Zeppelin III" reaches Berlin.

ALTHOUGH in a preliminary trial which was carried out over Lake Constance on Wednesday week, "Zeppelin III" behaved splendidly, during the actual journey to Berlin the usual trail of ill-luck followed the dirigible.

Leaving Friedrichshafen soon after half-past four on Friday morning, the airship ran into a heavy rainstorm about 12 miles from the start, but reached Ulm without any untoward incident, an average speed of 25 miles an hour being maintained. A strong wind from the north-east then began to give trouble, and later one of the propellers and its motor showed signs of weakness. A descent was therefore made near Ostheim, and some hours spent in fitting a new propeller and putting the engine right. Nuremberg was reached shortly after four, and the airship once more came down in order to replace the motor, which was giving trouble, with a new one. During this delay rain fell heavily, and the envelope got saturated, adding considerably to the weight to be lifted. Friday night was spent at Nuremberg, but at a quarter-past two a fresh start was made, and the vessel at once had to battle with a strong north-east wind. Very slow progress was made, and during the morning, while in the neighbourhood of Plauen, the forward port propeller was carried away. However, Bitterfeld, where Count Zeppelin was waiting to go on board, was reached just before half-past six, and the vessel once more anchored for the night, and to enable repairs to be carried out. Naturally the Berliners, who had been anxiously awaiting the arrival of their pet airship all day, were keenly disappointed.

The last stage of the journey was begun at half-past seven on Sunday morning, and the Tempelhof field was reached five hours later. Various evolutions were then carried out above the field and the city before proceeding to the Tegel shooting range, where the airship was safely anchored about two o'clock, nineteen hours late. The Emperor was waiting there with the Imperial family, and Mr. Orville Wright and his sister, who had just previously been presented to their Majesties. As the forward car touched the ground, Count Zeppelin jumped out, and his Majesty shook hands with him and introduced him to Orville Wright, after which the arrangements of the giant dirigible were explained. Then, taking his seat on the right of the Emperor in the Imperial motor car, the Count was driven to the palace, and lunched with His Majesty. During the early stage of the voyage there were nine persons on board, including Count Zeppelin's nephew and Engineer Duerr, who was in charge to Bitterfeld.

The Return Journey.

ABOUT half an hour before midnight on Sunday an ascent was made, and the vessel's bows pointed in the direction of Lake Constance, but before going very far the starboard fore-propeller dropped out, thus leaving only the two rear-propellers, and as these would only allow of a very low speed being maintained, it was decided to descend near Buebzig, only about fifty miles from the starting point. Then it was found that the propeller, in breaking away, had torn a hole in one of the inner gas-bags, thus allowing the gas to escape. It was anticipated that it would not be possible to make a fresh start before Wednesday. Count Zeppelin, in the course of an interview, attributed the mishaps to the new propeller arrangements, which have proved unsatis-

factory in their present form. He admits that the voyage was begun before the vessel had been thoroughly tried, but he took the risk as he did not wish to disappoint the people of Berlin.

A most anxious time was spent by those in charge on Tuesday night, and the united efforts of 150 soldiers were required to prevent the airship from breaking away during the gale. Work had to be suspended at midnight for three hours, but the repairs are being pushed on with feverish haste, as the members of the Reichstag are to visit Friedrichshafen on Saturday to inspect the dirigible.

Count Zeppelin had hoped that he would be able to show his vessel to the Emperor William at Berlin, and the Emperor Francis Joseph at Friedrichshafen, within three days. On Tuesday the Emperor of Austria was to visit the Zeppelin works, and in order that he might see a Zeppelin dirigible in flight the German Emperor ordered "Zeppelin II" to be sent from Cologne.

"Liberté" off the Stocks.

ON the 27th ult. the "Liberté," which has been built by MM. Lebaudy Frères, was taken out of her shed at Moissons and commenced her trials. Seven persons were carried on the first trip, which lasted a couple of hours, during which the dirigible behaved splendidly. On Saturday it was out again, this time



"ZEPPELIN III's" VOYAGE TO BERLIN.—The vast crowds watching the great airship's arrival over Tempelhofer Plain, near Berlin.

carrying nine passengers, including Mme. Pierre Lebaudy, Prince Murat, and M. Paul Lebaudy.

The capacity of the envelope is 4,000 cubic metres, and it is 63 metres in length. The motor is of 135-h.p., and this it is hoped will enable the vessel to attain a speed of 33 miles an hour under normal conditions. The headquarters of the "Liberté" will be at the garrison of Belfort.



BALLOONING AND ITS EXCITEMENTS.

To many of the uninitiated, ballooning appeals simply as a pastime of floating through the air, and coming to earth when the sustaining gas is more or less exhausted. That there is something beyond this, a variety of incident that makes the sport far from as tame as is generally thought, may be gathered from a very interesting account of a couple of ascents which the Hon. Mrs. Assheton Harbord has sent us. Mrs. Harbord's story is as follows:—

"On Saturday, August 7th, at 4.20 p.m., my silk balloon, 'Mercury' made an ascent, starting from the balloon ground of Short Brothers, at Battersea. Mr. C. F. Pollock was pilot, and Mr. Hubert Adderley and myself were passengers.

"The 'Mercury,' which has a capacity of 32,000 cubic ft., was equipped with her usual anchor, trail-rope, &c., and we took seven 50-lb. bags of ballast. A wind from N.N.E. took us through Surrey towards Cranleigh, where we made a temporary descent, left our anchor, and took in two bags of ballast.

"Three miles further on we again descended, got rid of half of the trail-rope, our empty sand bags, and took in two more bags.

"Going up again we proceeded to trail for some little distance, and in the dusk the rope got entangled in the boughs of a tree, where we were held captive for several minutes. We were eventually liberated by a man who climbed up the tree and cleverly managed in the growing darkness to untangle the trail-rope.

"At 9 p.m. we again descended at Mill Farm, near Lurgashall, where we secured the balloon for the night between a shed and a wagon, filling the car with bricks and large logs of wood, amply sufficient to hold her in safety.

"We were received by Mr. Shipway, who showed us the greatest hospitality, and put us up very comfortably until the following morning, when, after an early breakfast, we again ascended in the 'Mercury' at 8.10 a.m., but were unfortunately obliged to leave Mr. Adderley behind, as the balloon, owing to loss of gas, would only lift the weight of Mr. Pollock and myself, together with 1½ bags of ballast.

"We made a gradual but steady rise until our aneroid, whose circular dial only registers to 12,000 ft., had made a complete revolution, and indicated 3,600 ft. beyond this altitude, our true height at this moment, therefore, being 15,600 ft., when something went wrong with the mechanism of the instrument, and it burst.

"At this juncture the balloon lost her equilibrium, and we commenced to descend, Mr. Pollock utilising the very limited supply of ballast with consummate skill, and bringing us down safely at

"Morning Post" Airship.

WE learn that the envelope of the first dirigible airship ordered for England out of the *Morning Post* Fund, and now being built by Messrs. Lebaudy Frères, will be constructed of Hutchinson balloon cloth, which has satisfactorily passed some very severe Government tests in France.

10.30 a.m. at Kilmeston, 4 miles from Alresford, in Hampshire. During the descent we threw out our empty bags as well as the ballast, and though we fell from our extreme height to the ground in the space of ten minutes, the landing was quite a gentle one. Considering how fast we must have dropped, we suffered very little inconvenience, and the temporary sensation of deafness soon passed off.

"Our experience, I think, goes to prove conclusively that a long distance race, with a temporary descent of several hours, is not feasible for so small a balloon as the 'Mercury,' unless the pilot was unaccompanied by passengers, and able to carry proportionately more ballast, with the further possibility of obtaining a fresh supply.

"I believe I am also right in saying that our altitude of 15,600 ft. is the greatest which has ever been attained by a balloon of only 35,000 cubic ft. capacity.

"On August 9th I was discussing with Mr. John Dunville the balloon trips recently accomplished by Messrs. A. M. Singer and C. F. Pollock, who, it will be remembered, made the journey from Cowes to Rowlands Castle one day recently, and returned from Southampton to the Isle of Wight the following day. We thought that it would be extremely interesting to attempt a journey from London to the Isle of Wight, and as the wind seemed to be in a fairly favourable direction for carrying out the project, my 60,000 cubic ft. balloon 'Valkyrie' was filled at Battersea the same evening, and we stood by, ready to make a start should the conditions permit. We were somewhat disappointed in this respect, but by 5 a.m. the wind was far more favourable, and at 5.5 we ascended, Mr. Dunville piloting, and Mr. Oswald Short coming on board as the third passenger.

"The wind was approximately N.E., and we proceeded in the direction of Guildford and the Devil's Punch Bowl, attaining our greatest altitude of 5,000 ft. as we passed over Hindhead. We left the English coast about 3 miles to the west of Gosport, and crossed the Solent, trailing through the water most of the time, eventually descending in a field near the Naval Cadets' bathing stage at Osborn. The 5-mile passage over the water occupied no less than 44 mins., and during this time we expended four bags of ballast. The air currents were extremely shifty, varying between N.E. and N.W., which entailed a lot of clever manoeuvring on the part of Mr. Dunville, and I was immensely struck with the very skilful manner in which he handled our craft.

"This is the first occasion, to the best of my knowledge, that any member of the Aero Club, at all events, has made this crossing to the Isle of Wight starting from London, and I thought, therefore, that a brief description of our trip might prove of interest to the readers of FLIGHT."

Cochrane propeller, 14½ ins. diam., thrust at 1,580 r.p.m. = 32 ozs.

Turner propeller, 11 ins. diam., thrust at 1,750 r.p.m. = 14½ ozs.

An Aerodrome Wanted.

ALTHOUGH the Aero Club of France have had under consideration a lot of projects for their aerodrome, none quite fulfil the conditions laid down by the Committee, which have now been published. They are as follows:—

- (1) Minimum surface, 120 hectares (practically 300 acres) with a smooth plot for starting and landing.
- (2) Maximum distance from railway station, 2 kiloms.
- (3) Maximum distance from Paris, 40 kiloms. by road, and half an hour's journey by train.
- (4) Maximum rent, 175 francs per hectare (about £2 16s. per acre).

Turner and Cochrane Propeller Test.

THE propeller to which Mr. L. Turner referred in his letter appearing in our correspondence of August 21st is illustrated here-with, and was recently submitted to trial on Mr. Cochrane's apparatus, the respective inventors having agreed to a private experiment. The results, which Mr. Cochrane has forwarded to us, are as follows:—

